

REMARKS

Reconsideration of the application is respectfully requested.

Amendments to the Specification. The amendment beginning on page 5, line 19 of the specification as filed merely explicitly states the inherent properties of GenBank Accession No. AF078078 at the time of filing. As shown in annexed Exhibit A, this GenBank Accession Number entry (available on the NCBI website at www.ncbi.nlm.nih.gov) contains both the cDNA and amino acid sequence for P972 and has not been revised since it was first available at NCBI on December 6, 1998 (*i.e.*, before the July 31, 2000 priority date of this application). Thus, specification has been amended to include the cDNA and amino acid sequences of P972 as SEQ ID NOS: 1 and 2, respectively. Since the specification can be amended to include inherent properties, no new matter has been added to this application. See MPEP §2163.07(a).

The remaining amendments to the specification amend the specification to comply with 37 C.F.R. §1.821(d). According to this rule, the assigned sequence identifier must be used when the specification discusses the sequence. No new matter has been added by way of these amendments.

Amendments to the Claims. Claims 11-21 are currently pending. Applicants thank the Examiner for indicating claim 20 is allowable based on previously filed amendments and corresponding arguments. With entry of this Amendment, claim 19 will be amended and claims 38 and 39 will be added. Support for claim 19 can be found on page 5, lines 16-19 of the specification as filed. Support for new claims 38 and 39 can be found in the presently amended paragraph starting on page 5, line 16 of the specification as filed.

Thus, after entry of this amendment, claims 11-21, 38, and 39 will be pending; claims 1-10 and 22-37 remain canceled; and claims 11-18 remain withdrawn.

Oath/Declaration

The Examiner has indicated that the Oath or Declaration remains defective because method claims 19-21 were not filed in the original application with the original Oath and there is no statement or indication in the file of record that all of the Inventors listed in the original Oath were the Inventors of the newly added method claims.

Applicants will provide a new Oath or Declaration in due course upon the allowance of the claimed subject matter.

Claim Rejections - 35 U.S.C. §112

Claims 19 and 21 are rejected as failing to comply with both the written description and enablement requirements. Specifically, the Examiner contends that the specification does not convey that the Applicants were in possession of the broad genus of wild-type P972 genes recited in these claims and that the specification does not enable those skilled in the art to practice the claimed invention. According to the Examiner, this genus is insufficiently disclosed by the one species that is adequately disclosed in the application as filed (*i.e.*, GenBank Accession No. AF078078).

On page 6, lines 14-18 of this Action, the Examiner has suggested that Applicants amend the specification to include the nucleotide sequence for GenBank Accession No. AF078078 and amend the claims to recite this sequence as a SEQ ID NO. The Examiner has indicated that these amendments would overcome both the written description and enablement rejections and avoid an indefiniteness rejection.

To overcome these rejections in light of the Examiner's suggestions, Applicants have incorporated both the cDNA and amino acid sequences for P972 into the specification as SEQ ID NOS: 1 and 2, respectively. In addition, claim 19 has been amended to recite a method to treat cancer using an adenovirus containing an expression vector comprising a DNA sequence encoding for a human wild-type P972 protein and claims 38 and 39 have been added to set forth that the amino acid sequence for the human wild-type P972 protein is SEQ ID NO: 2 and the nucleotide sequence encoding the human wild-type P972 protein is SEQ ID NO: 1, respectively.

Applicants assert that “a DNA sequence encoding for a human wild-type P972 protein” is sufficiently described in the specification as filed. Applicants note that the GenBank Accession Number corresponding to the human wild-type cDNA sequence for the P972 gene (*i.e.*, GenBank Accession No.: AF078078) is referenced on page 5, line 19 of the specification as filed. This GenBank Accession Number contains both a cDNA and protein sequence of the P972 gene as shown in Exhibit A. A person skilled in the art can use the P972 protein sequence to generate DNA sequences that encode for the P972 protein without further teachings from the specification. (“Since the genetic code is widely known, a disclosure of an amino acid sequence would provide sufficient information such that one would accept that an applicant was in possession of the full genus of nucleic acids encoding a given amino acid sequence, but not necessarily any particular species.”) MPEP §2163(II)(A)(3)(a)(ii). Thus, since the sequence for the human wild-type P972 protein is disclosed by the specification, the DNA sequences of claim 19 find adequate written description in the specification.

It is respectfully submitted that the term “a DNA sequence encoding for a human wild-type P972 protein” is enabled. No undue or unreasonable experimentation is required for a person of ordinary skill in the art to generate the claimed DNA sequences. A person skilled in the art can determine the nucleotide sequences for the claimed DNA sequences using the specification as filed. The specification discloses the sequence for the human wild-type P972 protein and the genetic code is well known. A person skilled in the art can then use routine molecular biology techniques to generate the claimed DNA sequences and insert them into the expression vector of claim 19. As such, the DNA sequences recited in the claims are enabled.

In light of the above amendments and arguments, Applicants respectfully request withdrawal of both the written description and enablement rejections.

Conclusion

In view of the above amendments and arguments, Applicants believe the pending application is in condition for allowance.

Dated: May 19, 2006

Respectfully submitted,

By


S. Peter Ludwig

Registration No.: 25,351

DARBY & DARBY P.C.

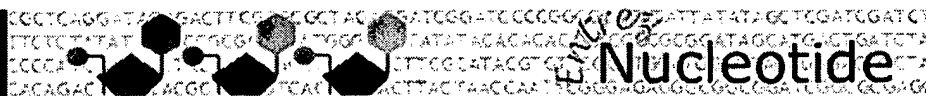
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LOCUS AF078078 551 bp mRNA linear PRI 06-DEC-1998
 DEFINITION Homo sapiens growth arrest and DNA-damage-inducible protein
 GADD45gamma mRNA, complete cds.

ACCESSION AF078078
 VERSION AF078078.1 GI:3978393

KEYWORDS .

SOURCE Homo sapiens (human)

ORGANISM [Homo sapiens](#)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini;
 Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 551)

AUTHORS Takekawa,M. and Saito,H.

TITLE A family of stress-inducible GADD45-like proteins mediate
 activation of the stress-responsive MTK1/MEKK4 MAPKKK

JOURNAL Cell 95 (4), 521-530 (1998)

PUBMED [9827804](#)

REFERENCE 2 (bases 1 to 551)

AUTHORS Takekawa,M. and Saito,H.

TITLE Direct Submission

JOURNAL Submitted (14-JUL-1998) Dana-Farber Cancer Institute, Harvard
 Medical School, 44 Binney Street, Boston, MA 02115, USA

FEATURES Location/Qualifiers

source 1..551

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

[CDS](#) 16..495

/function="mediates activation of stress-responsive
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/note="stress-inducible; similar to GADD45"

/codon_start=1

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/protein_id="AAC83329.1"

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/translation="MTLEEVRGQDTVPESTARMQGAGKALHELLLSAQRQGCLTAGVY
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ORIGIN

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541 gggcctagag c

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Revision history for AF078078

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GI	Version	Update Date	Status
3978393	1	Dec 6 1998 12:26 AM	Live

Accession AF078078 was first seen at NCBI on Dec 6 1998 12:26 AM

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